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# A Study of Lettuces.

THE RESULTS OF A VARIETAL TEST OF LETTUCES FOR THE BENEFIT OF THE LETTUCE GROWERS OF NORTH CAROLINA.

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## A STUDY OF LETTUCES.

W. F. MASSEY, HORTICULTURIST.

The great increase of interest in the cultivation of lettuce as a winter crop in Eastern North Carolina has made it important that the growers should be acquainted with the best varieties for their purpose. Out of the long list of varieties of lettuce found in the catalogues of seedsmen there are really few that are adapted to winter growing in frames or greenhouses. While lettuce is grown here almost entirely in frames covered with plant cloth, we are sure that the growers would consult their own interest by using glass sashes in place of the cloth, and for the very best results. While it is seldom that any artificial heat is required in our climate for the production of lettuce in winter, we have at times winters when a little heat would result in the saving of the crop from serious damage. Hence we believe that as our people get more familiar with the use of glass, there will be found a decided advantage in the use of broad, low, flat-roofed greenhouses with some means for heating them when it is desirable, and with abundant means for ventilation at all other times. The fact that the lettuce shipped from our Eastern section in winter and early spring sells in the market as "Southern Lettuce" at a lower price than the product of the greenhouses of the North, is of itself an indication that there is room for improvement in our culture and handling of the crop. Our growers always ship their lettuce in barrels and it is sold by the barrel. If the product was as good as that from the greenhouses North, and was shipped in handy boxes, it would be sold by the dozen heads and would bring a larger price. I know this from practical experience. Years ago I was engaged in growing lettuce extensively at Fortress Monroe, Va., for the Northern market, and always sold my lettuce in New York by the dozen heads, and at prices that would double those our growers consider good when sold by the barrel.

Then, too, there must be a closer study of the demands of the markets where the crop is sold. As a rule I believe that there is more profit in the close-heading cabbage sorts, like the Tennis Ball —than in the loose, curled lettuce like the Simpson or even the Grand Rapids. Of course, where the crop is sold by the barrel the large lettuces like the Grand Rapids and the Black seed Simpson fill up faster, but even then I believe that the price per barrel of the close, heading sorts would be enough higher to make them

more profitable. In our experience we have not yet found any lettuce better than a good strain of Black-Seeded Tennis Ball especially for the early or Christmas crop, while for the later crops we believe that some of the Butter varieties are better than the Big Boston, which has always been rather unsatisfactory with us.

Our variety test of lettuces this spring has not been as satisfactory as we could have wished, as we did not have it under the same conditions as would confront the market-growers in winter. This came from the fact that we were unable to get our frames ready in time for the regular winter crop. Hence the test is simply comparative and does not reach the question as to which is really the best for winter use, as our lettuce was heading the last of April. We have, however, learned enough to enable us to make a selection of varieties for further trial under real winter conditions the coming fall, and also to note some sorts that can even now be recommended for trial by our market-growers. One great advantage in the use of glass over the plant cloth is the fact that we can get more crops during the winter and spring than can be had under the cloth, and can get better lettuce. But it is one of the curious facts about the sale of lettuce that, while the crop sold at Christmas and during the winter may bring fair prices, the largest price is generally to be had for the lettuce that comes in the last of March, when every one wants it. In the dead of winter lettuce is sought only by a certain and limited class of buyers, while the spring lettuce is in general demand.

Varieties tested were as follows:

*Maule's Improved Hanson.*—This is a fine strain of the well known Hanson. It is one of the best for spring use but is not adapted to culture under glass, though used to some extent for that purpose. Makes very large heads and the fringed margins of the leaves make it a handsome variety. Raised many years ago by Col. George Hanson, of Kent Co., Md., from whom it takes its name.

*Tilton's White Star.*—This is a very early, light green sort, making loose heads of many leaves like the old Oak Leaf. It has been recommended for culture under glass, but we are not inclined to think it will be valuable for this purpose, though worth trying further. It seems well adapted to stand hot weather.

*Big Boston.*—This sort has been highly recommended and used to a large extent for winter growing, but in our experience there are other sorts far superior. It is late and heads irregularly with us.

*Denver Market.*—We had two samples of this from different seedsmen. One of the samples did not seem to be a well fixed type, but the other from Mr. Maule, of Philadelphia, is a great improvement on the Grand Rapids, and for those who want the curled sorts it is very promising.

*Iceberg.*—An immense headed lettuce of the curled India type, which will be valuable for late spring use, as it seems to stand the heat well. It is of lighter color than the Italian Ice lettuce.

*Maule's Philadelphia Butter Lettuce.*—This is probably the largest of the Butter lettuces, and a very promising sort for the early spring crop, and also for standing the heat later on. Worth trial under glass for the last crop.

*Early Prize Head.*—This did not prove very early with us. It has the reddish tinge characteristic of the Brown Dutch class, and makes fairly good heads. May be good for the outdoor crop.

*Stubborn Seeder.*—A very large heading Cabbage or Butter lettuce, which seems to deserve its name, as it holds its heads well in the heat and shows no signs as yet (late May) of running to seed.

*Black Seed Simpson.*—This is in our experience the very best of the loose curled lettuces of the Silesia group. Makes a very large, loose head or bunch and is very brittle and handsome. A first-class lettuce of the kind and one that forces well.

*Green Fringed.*—A very handsome lettuce for garnishing, and for standing hot weather in the spring in the open ground, but of no use for forcing in winter.

*All the Year Round.*—This is a Cabbage lettuce of medium size, which in our experience is one of the earliest to head under glass, and is promising for the Christmas crop along with the Tennis Ball. With us it has headed earlier than any other sort.

*Black Seed Tennis Ball.*—This we consider the best of all forcing lettuces, because, from its compact growth it can be planted closer than most others, and it heads uniformly and very compact. Boston Market is claimed to be an improvement on it, but we have not found it so.

*Boston Curled.*—This is the most handsome of all the fringed lettuces for garnishing purposes and for standing heat. Worthless for forcing.

*Grand Rapids.*—This much praised variety we have not succeeded with well, and so far do not consider it as valuable as the Black Seeded Simpson. Further trial may make a difference in our opinion, but as yet we prefer the Simpson.

*Lancaster.*—A light yellowish strap-leaf sort similar in growth to the Oak Leaf, which promises to stand the heat well. Would not select it for winter use.

*Yellow Seed Butter.*—A standard old Butter lettuce, which has done good service in the past, but is now superseded by improved Butter sorts.

*San Francisco Market.*—This is one of the best of the newer Butter lettuces and we consider it worthy of further trial under glass.

*Black Seed Butter.*—Earlier than the old Yellow-Seed Butter and better, but there are still better sorts of the class.

*California Cream Butter.*—In our test this is far the best of all the Butter lettuces and is a very promising sort for winter culture for the early spring crop. It heads remarkably solid and uniformly, and is the best lettuce we have had on the table the past winter. We were fortunate in having this variety both in our winter frames in our home garden and among the later ones of the general test, and can confidently recommend it to our growers as far better than the Big Boston Makes better heads than the Boston and takes less room.

*Gold Nugget.*—Light yellowish green, of medium size and the earliest of the Butter class. Worthy of further trial.

*Philadelphia Early White Cabbage.*—A very early sort, which may do well under glass, but runs to seed directly as the weather gets warm.

*Early White Seed Boston Market.*—A very early and compact header, which can be planted closely, and is good for culture under glass, but we prefer the Black Seed Tennis Ball for the same planting.

*Hittinger's Belmont.*—Very similar in general character to the Boston Market, but much larger heads. We consider it well worth trying further.

*Mignonette and Improved Mignonette.*—These are small heading varieties of the Brown Dutch type. Heads quite small, and the improved a little larger than the other, but neither worth growing among the many better lettuces.

*Morse and Morse Cabbage.*—We have these under two names, neither of which is a true Cabbage lettuce. Both are curled lettuces and the Morse Cabbage seems to make a rather larger head than the Morse. May answer as well as Grand Rapids for those who want a curled lettuce. In fact they are better here than Grand Rapids.

*Early Curled Silesia.*—The old type, which is now superseded by better curled lettuces, and we see no reason for continuing it and some others in the catalogues.

*Onandago.*—One of the Brown Dutch type, and inferior in our experience to the old Brown Dutch.

*Burpee's Tomhannock.*—This is the most handsome of all the Brown Dutch class. Makes fine large heads, and the edges of the leaves are beautifully margined with reddish brown. Quite desirable for outdoor crop.

*Henderson's New York.*—A fine large heading sort that seems to partake partly of the character of the Curled India and the Butter sorts. It is one of the best for late spring use, as it is very slow in running to seed. Probably a selection from the Deacon.

*Italian Ice.*—Very large and fine. Darker in color than the Iceberg and of larger size. One of the best of its class.

*Paris Self-Folding White Cos.*—Cos lettuces as a rule are not popular in this country, as most of them involve too much attention to tying up the heads for blanching. When well grown they are appreciated by critical consumers. This variety seems to be a true self-header and a very fine and promising sort. It will be a long time, however, before there is much demand for Cos lettuce in this country.

*Giant White Cos.*—This is an immense header and a fine lettuce when properly handled.

*Dwarf White Heart Cos.*—We can confidently recommend this dwarf Cos to private growers who want a Cos lettuce. It heads uniformly without tying and is really a very fine lettuce.

*No. 1851.*—A variety of lettuce sent for trial by W. Aster Burpee, of Philadelphia. This is the most peculiarly distinct variety we have seen. The leaves are almost a pure yellow and covered all over with reddish brown spots. Heads small and growth feeble. Interesting as a variety, but hardly of great practical value.

As we have said, our test this spring is but tentative, and the opinions expressed may be changed by future experience. We are sorry that our experience with the Grand Rapids does not confirm the high opinion which is given in nearly every seed catalogue in the country, and some of our growers may have had a different experience with it. But as a rule we believe that the heading sorts will pay the market-grower better than the curled lettuces.

We do not like to make any decided recommendations from this test, but feel that we cannot go amiss in urging our growers to test the California Cream Butter lettuce—an unnecessarily long name by the way—for we believe it will be found superior to the Big Boston for the same season.

If this brief statement of experience will have helped any of our growers we will be abundantly rewarded. We hope by another winter to be better fixed for lettuce growing and invite the lettuce growers of Eastern North Carolina to visit us then and study the varieties for themselves. We hope to have then an object lesson that will save them many dollars in the profits of this crop, which is of such growing importance to North Carolina. We hope to get them into more skillful methods, not only of growing the crop but in marketing it so as to realize higher prices. The Station will, at all times, be ready to answer promptly all letters of inquiry in regard to any crop and its best treatment.

Our full Bulletin on the use of glass in the cultivation of market crops will soon be out, and we wish to get it in the hands of every trucker in the market garden section of the State.